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Before the
Federal Communications Commission
Washington, D.C. 20554

MAILED

JUN 30 2008

In the Matter of)

Service Rules for Advanced Wireless Services
in the 2155-2175 MHz Band)WT Docket No. 07-195Service Rules for Advanced Wireless Services in
the 1915-1920 MHz, 1995-2000 MHz, 2020-2025
MHz and 2175-2180 MHz Bands)

WT Docket No. 04-356

FURTHER NOTICE OF PROPOSED RULEMAKING**Adopted: June 20, 2008****Released: June 20, 2008****Comment Date: (14 days after publication in the Federal Register)****Reply Comment Date: (21 days after publication in the Federal Register)**

By the Commission:

I. INTRODUCTION

1. In this Further Notice of Proposed Rule Making (*Further Notice*), we seek comment on proposed service rules for Advanced Wireless Service (AWS)¹ spectrum in the 1915-1920 MHz, 1995-2000 MHz, and 2155-2180 MHz bands, as set forth in Appendix A. In taking a further step towards adoption of service rules for these bands, our goal is to promote the deployment and ubiquitous availability of broadband services across the country and to facilitate the use of AWS spectrum for the benefit of consumers.

II. DISCUSSION

2. In a Notice of Proposed Rulemaking in WT Docket No. 04-356, the Commission sought comment on rules for AWS spectrum in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz, and 2175-2180 MHz bands.² In a Notice of Proposed Rulemaking in WT Docket No. 07-195, we sought comment on rules for AWS spectrum in the 2155-2175 MHz band.³ To further supplement these *Notices of Proposed Rulemaking* and the current extensive record in these proceedings, we are seeking expedited

¹ Advanced Wireless Services is the collective term we use for new and innovative fixed and mobile terrestrial wireless applications using bandwidth that is sufficient for the provision of a variety of applications, including those using voice and data (such as Internet browsing, message services, and full-motion video) content. Although AWS is commonly associated with so-called third generation (3G) applications and has been predicted to build on the successes of such current-generation commercial wireless services as cellular and Broadband Personal Communications Services (PCS), the services ultimately provided by AWS licensees are limited only by the Fixed and Mobile designation of the spectrum we allocate for AWS and the service rules we ultimately adopt for the bands.

² Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands, WT Docket No. 04-356, Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Notice of Proposed Rulemaking*, 19 FCC Rcd 19263 (2004) (*AWS-2 NPRM*).

³ Service Rules for Advanced Wireless Services in the 2155-2175 MHz Band, WT Docket No. 07-195, *Notice of Proposed Rulemaking*, 22 FCC Rcd 17035 (2007) (*AWS-3 NPRM*).

comment on a proposed set of rules for these bands. We will consider comments on these proposed rules in conjunction with the record developed in response to the various proposals set out in the earlier Notices.

3. Specifically, we propose to adopt application, licensing, operating, and technical rules for the 2155-2180 MHz band (AWS-3 band), including rules that would:

- Combine the 2155-2175 MHz band with the 2175-2180 MHz band in order to create a 25 megahertz block of spectrum.
- Permit downlink and uplink transmissions throughout the entire 2155-2180 MHz band.
- Adopt a single nationwide license for the 2155-2180 MHz band.
- Adopt open eligibility for the 2155-2180 MHz band.
- Require the licensee to provide free, two-way broadband Internet service including:
 - engineered data rates of at least 768 kbps downstream using up to 25 percent of the licensee's wireless network capacity.
 - an "always on" network-based filtering mechanism.
- Require the licensee to provide for open devices and open applications for its premium service and open devices for its free service.
- Provide an initial license term of ten years and subsequent renewal terms of ten years.
- Require the licensee to provide signal coverage and offer service to: 1) at least 50 percent of the total population of the nation within four years of commencement of the license term and 2) at least 95 percent of the total population of the nation at the end of the 10-year license term.
- Allow licensees to disaggregate, partition, and lease the spectrum.
- Provide that mutually exclusive applications should be resolved through competitive bidding.
- Require AWS-3 mobiles to attenuate out-of-band emissions (OOBE) by $60 + 10\log(P)$ dB outside of the AWS-3 band, and establish a power limit for AWS-3 mobile devices of 23 dBm/MHz equivalent isotropically radiated power (EIRP).
- Require an OOBE limit of $43 + 10\log(P)$ dB for AWS-3 base and fixed downlink stations and a power limit of 1640 watts peak EIRP in non-rural areas and 3280 watts peak EIRP in rural areas.

4. We also propose to adopt application, licensing, operating, and technical rules for the 1915-1920 MHz and 1995-2000 MHz bands (H Block), including rules that would:

- License the H Block using exclusive geographic area licensing on a Basic Trading Area (BTA) basis.
- Adopt open eligibility for the H Block.
- Provide an initial license term of ten years and subsequent renewal terms of ten years.
- Require an H Block licensee to provide signal coverage and offer service to: 1) at least 35 percent of the population in each licensed area within four years and 2) at least 70 percent of the population in each licensed area at the end of the license term.
- Allow licensees to disaggregate, partition, and lease the spectrum.
- Provide that mutually exclusive applications should be resolved through competitive bidding.
- Require H Block licensees in the 1915-1920 MHz band to pay a *pro rata* share of expenses

previously incurred by UTAM Inc. in clearing that band.

- Adopt both relocation requirements for H Block entrants in the 1995-2000 MHz band and procedures for cost-sharing among other new entrants in the Broadcast Auxiliary Service band, including Sprint Nextel and Mobile Satellite Service entrants.
- Prohibit base and fixed transmission in the 1915-1920 MHz band.
- Require mobiles at 1915-1920 MHz to attenuate OOB by $90 + 10\log P$ dB within the PCS band (1930-1990 MHz band), and establish a power limit for mobiles of 23 dBm/MHz EIRP.
- Prohibit mobile transmission in the 1995-2000 MHz band.
- Adopt an OOB limit of $43 + 10 \log (P)$ dB for base and fixed stations at 1995-2000 MHz and a power limit of 1640 watts peak EIRP in non-rural areas and 3280 watts peak EIRP in rural areas.

5. We seek comment on these proposed rules for the AWS-3 band and the H Block, as set forth in Appendix A. We note that combining the 2155-2175 MHz band with the 2175-2180 MHz band may allow an AWS-3 licensee to make more robust use of this spectrum block while meeting a stricter OOB limit than traditionally applied in bands designated for flexible use, such as the AWS-1 and 700 MHz bands.⁴ To the extent that commenters do not support combining the 2155-2175 MHz band with the 2175-2180 MHz band, they should indicate whether, in the alternative, a more traditional OOB limit of $43+10\log(P)$ dB would be appropriate for the 2155-2175 MHz band.

III. PROCEDURAL MATTERS

A. *Ex Parte* Rules – Permit-But-Disclose Proceeding

6. This is a permit-but-disclose notice and comment rulemaking proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed pursuant to the Commission's rules.⁵

B. Comment Period and Procedures

7. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's rules,⁶ interested parties may file comments on this *Further Notice* on or before **14 days after publication in the Federal Register**, and interested parties may file reply comments on this *Further Notice* on or before **21 days after publication in the Federal Register**. Comments and reply comments should be filed in **WT Docket No. 07-195, and WT Docket No. 04-356**, and may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.⁷ All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding.

8. Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket number. Parties may also submit an electronic comment by e-mail via the Internet. To obtain filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message: "get form <your e-mail address>." A sample form and directions will be sent in reply.

⁴ See, e.g., 47 C.F.R. §§ 27.53(c)(1)(2), 27.53(h).

⁵ See generally 47 C.F.R. §§ 1.1202, 1.1203, 1.1206.

⁶ See 47 C.F.R. §§ 1.415, 1.419.

⁷ Electronic Filing of Documents in Rulemaking Proceedings, *Report and Order*, 13 FCC Rcd 11322 (1998).

9. Parties who choose to file by paper must file an original and four copies of each filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). The Commission's contractor, Natek, Inc., will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, SW, Washington, D.C. 20554. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

10. Parties who choose to file by paper should also submit their comments on diskette. These diskettes should be attached to the original paper filing submitted to the Office of the Secretary. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible format using Microsoft TM Word 97 for Windows or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's name, proceeding, type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file. In addition, commenters should send diskette copies to the Commission's copy contractor, Best Copy and Printing, Inc., 445 12th Street, SW, Room CY-B402, Washington, DC, 20554, 202-863-2893.

11. The public may view the documents filed in this proceeding during regular business hours in the FCC Reference Information Center, Federal Communications Commission, 445 12th Street, S.W., Room CY-A257, Washington, D. C. 20554, and on the Commission's Internet Home Page: <<http://www.fcc.gov>>. Copies of comments and reply comments are also available through the Commission's duplicating contractor: Best Copy and Printing, Inc., 445 12th Street, SW, Room CY-B402, Washington, DC, 20554, (202) 863-2893. Accessible formats (computer diskettes, large print, audio recording and Braille) are available to persons with disabilities by contacting Brian Millin, of the Consumer & Governmental Affairs Bureau, at (202) 418-7426, TTY (202) 418-7365, or at <bmillin@fcc.gov>.

C. Supplemental Initial Regulatory Flexibility Analysis

12. As required by the Regulatory Flexibility Act of 1980 (RFA),⁸ the Commission has prepared a Supplemental Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in the Notice. The analysis is found in attached Appendix B. We request written public comment on the analysis. Comments must be filed by the same dates as listed in paragraph 7 above, and must have a separate and distinct heading designating them as responses to the Supplemental IRFA. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Further Notice, including the Supplemental IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

D. Initial Paperwork Reduction Analysis

13. This document contains proposed new or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. Public and agency comments are due 60 days after date of publication in the Federal

⁸ 5 U.S.C. § 603.

Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition, pursuant to the Small Business Paperwork Relief Act of 2002,⁹ we seek specific comment on how we might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

14. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Judith Boley Herman, Federal Communications Commission, 445 12th Street, S.W., Room 1-B441, Washington, D.C. 20554, or via the Internet to <Judith-B.Herman@fcc.gov>, and to Nicholas A. Fraser, Policy Analyst, Office of Management and Budget (OMB), Room 10236, New Executive Office Building (NEOB), 725 17th Street, N.W., Washington, D.C. 20503, 202-395-5887, via the Internet at <nfraser@omb.eop.gov> or via fax at 202-395-5167.

E. Further Information

15. For further information concerning this rulemaking proceeding, contact Peter Daronco, Broadband Division, at (202) 418-2487, Wireless Telecommunications Bureau, Federal Communications Commission, 445 12th Street, S.W., Room 3-C124, Washington, D.C. 20554; or via the Internet to <peter.daronco@fcc.gov>.

IV. ORDERING CLAUSES

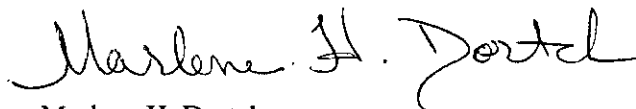
16. Accordingly, IT IS ORDERED, pursuant to sections 1, 2, 4(i), 7, 10, 201, 214, 301, 302, 303, 307, 308, 309, 310, 319, 324, 332 and 333 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 157, 160, 201, 214, 301, 302, 303, 307, 308, 309, 310, 319, 324, 332, 333, that this Further Notice of Proposed Rulemaking is hereby ADOPTED.

17. IT IS FURTHER ORDERED that NOTICE IS HEREBY GIVEN of the proposed regulatory changes described in this Further Notice, and that comment is sought on these proposals.

18. IT IS FURTHER ORDERED that the Supplemental Initial Regulatory Flexibility Analysis IS ADOPTED.

19. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Further Notice, including the Supplemental Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION



Marlene H. Dortch
Secretary

⁹ Pub. L. 107-198, see 44 U.S.C. 3506(c)(4).

APPENDIX A
Proposed Rules

Part 27 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 27—MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

1. The authority citation for Part 27 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 301, 302, 303, 307, 309, 332, 336, and 337 unless otherwise noted.

2. Section 27.1 is revised as follows:

§ 27.1 Basis and purpose.

This section contains the statutory basis for this part of the rules and provides the purpose for which this part is issued.

(a) Basis. The rules for miscellaneous wireless communications services (WCS) in this part are promulgated under the provisions of the Communications Act of 1934, as amended, that vest authority in the Federal Communications Commission to regulate radio transmission and to issue licenses for radio stations.

(b) Purpose. This part states the conditions under which spectrum is made available and licensed for the provision of wireless communications services in the following bands.

- (1) 2305–2320 MHz and 2345–2360 MHz.
- (2) 746–763 MHz, 775–793 MHz, and 805–806 MHz.
- (3) 698–746 MHz.
- (4) 1390–1392 MHz.
- (5) 1392–1395 MHz and 1432–1435 MHz.
- (6) 1670–1675 MHz.
- (7) [Reserved]
- (8) 1710–1755 MHz and 2110–2155 MHz.
- (9) 2495–2690 MHz.
- (10) 2155–2180 MHz.
- (11) 1915–1920 MHz and 1995–2000 MHz.

(c) Scope. The rules in this part apply only to stations authorized under this part.

3. Section 27.4 is revised to add new definitions in alphabetically appropriate locations as follows:

§ 27.4 Terms and Definitions.

Downlink Fixed Station. A fixed station employed by a carrier or licensee to transmit to an end user's fixed station.

Uplink Fixed Station. A fixed station employed by an end user to transmit to a carrier's or licensee's fixed stations.

4. Section 27.5 is revised to add new paragraphs (j) and (k) as follows:

§ 27.5 Frequencies.

* * *

(j) *2155–2180 MHz band.* The 2155–2180 MHz band is available for assignment for Advanced Wireless Services

k) *The paired 1915-1920 MHz and 1995-2000 MHz.* The paired 1915-1920 MHz and 1995-2000 MHz bands are available for assignment for Advanced Wireless Services. Each winning bidder awarded a license in the initial AWS auction for spectrum authorizations in the 1915-1920 MHz band must reimburse UTAM, Inc. a *pro rata share* of the total expenses incurred by UTAM, Inc. as of the date that the new entrants gain access to the band. Specifically, AWS licensees in the 1915-1920 MHz band, which constitutes 25% of the 1910-1930 MHz band, shall, on a *pro rata* shared basis, reimburse 25% of the total relocation costs incurred by UTAM, Inc. in clearing the 1910-1930 MHz band of Part 101 Fixed Microwave Service (FS) links. We will require a winning bidder of an AWS H Block license (1915-1920 MHz; 1995-2000 MHz) to reimburse UTAM, Inc. pursuant to the following formula within 30 days of grant of their long-form application for the license. The amount owed will be determined by multiplying the net winning bid for an H Block license (*i.e.*, an individual BTA) by \$12,629,857 and then dividing by the sum of the net winning bids for all H Block licenses won in the initial auction. New entrants will be responsible for the actual costs associated with future relocation activities in their licensed spectrum, but will be entitled to seek reimbursement from UTAM, Inc. for the proportion of those band clearing costs that benefit users of the 1910-1915 MHz and 1920-1930 MHz band. Because the Commission's Rules governing the relocation of FS licensees from this band and the right to compensation for costs associated with such relocation has already sunset on April 4, 2005, AWS licensees at 1915-1920 MHz are not responsible for reimbursing PCS entities for any costs incurred by PCS entities, other than those incurred by UTAM, Inc. as noted above, for the relocation of FS links that may otherwise have triggered a cost-sharing obligation absent the sunset date for those rules.

5. Section 27.6 is revised by amending paragraphs (a) and (h) as follows:

§ 27.6 Service areas.

a) WCS and AWS service areas include Basic Trading Areas (as defined in section 24.202(b) of this chapter), Economic Areas (EAs), Major Economic Areas (MEAs), Regional Economic Area Groupings (REAGs), cellular markets comprising Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs), and a nationwide area. MEAs and REAGs are defined in the Table immediately following paragraph (a)(1) of this section. Both MEAs and REAGs are based on the U.S. Department of Commerce's EAs. See 60 FR 13114 (March 10, 1995). In addition, the Commission shall separately license Guam and the Northern Mariana Islands, Puerto Rico and the United States Virgin Islands, American Samoa, and the Gulf of Mexico, which have been assigned Commission-created EA numbers 173–176, respectively. The nationwide area is composed of the contiguous 48 states, Alaska, Hawaii, the

Gulf of Mexico, and the U.S. territories. Maps of the EAs, MEAs, MSAs, RSAs, and REAGs and the Federal Register Notice that established the 172 EAs are available for public inspection and copying at the Reference Information Center, Consumer and Governmental Affairs Bureau, Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554.

(h) *Advanced Wireless Services (AWS)*. AWS service areas for the 1710–1755 MHz and 2110–2155 MHz, 1915–1920 MHz and 1995–2000 MHz, and 2155–2180 MHz bands are as follows:

(1) Service areas for Block A (1710–1720 MHz and 2110–2120 MHz) are based on cellular markets comprising Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs) as defined by Public Notice Report No. CL–92–40 “Common Carrier Public Mobile Services Information, Cellular MSA/RSA Markets and Counties,” dated January 24, 1992, DA 92–109, 7 FCC Rcd 742 (1992), with the following modifications:

(i) The service areas of cellular markets that border the U.S. coastline of the Gulf of Mexico extend 12 nautical miles from the U.S. Gulf coastline.

(ii) The service area of cellular market 306 that comprises the water area of the Gulf of Mexico extends from 12 nautical miles off the U.S. Gulf coast outward into the Gulf.

(2) Service areas for Blocks B (1720–1730 MHz and 2120–2130 MHz) and C (1730–1735 MHz and 2130–2135 MHz) are based on Economic Areas (EAs) as defined in paragraph (a) of this section.

(3) Service areas for blocks D (1735–1740 MHz and 2135–2140 MHz), E (1740–1745 MHz and 2140–2145 MHz) and F (1745–1755 MHz and 2145–2155 MHz) are based on Regional Economic Area Groupings (REAGs) as defined by paragraph (a) of this section.

(4) The service areas for 1915–1920 and 1995–2000 MHz Service are based on Basic Trading Areas as defined in paragraph (a) of this section.

(5) The service area for 2155–2180 MHz is nationwide as defined by paragraph (a) of this section.

* * * * *

6. Section 27.11 is revised to add new paragraphs (j) and (k) as follows:

§ 27.11 Initial authorization.

* * *

(j) *2155–2180 MHz band*. Authorization for the 2155–2180 MHz band shall consist of a single 25 megahertz block of spectrum based on the geographic area specified in § 27.6(h).

(k) *The paired 1915–1920 MHz and 1995–2000 MHz bands*. Authorizations for the paired 1915–1920 MHz and 1995–2000 MHz bands shall consist of two paired channels of 5 megahertz each based on the geographic areas specified in § 27.6(h).

7. Section 27.13 is revised to add new paragraphs (i) and (j) as follows:

§ 27.13 License period.

* * *

(i) *2155–2180 MHz band*. Initial authorizations for the 2155–2180 MHz band will have a term not to

exceed ten years from the date of initial issuance or renewal.

(i) *The paired 1915-1920 MHz and 1995-2000 MHz bands.* Initial authorizations for the paired 1915-1920 MHz and 1995-2000 MHz bands will have a term not to exceed ten years from the date of initial issuance or renewal.

8. Section 27.14 is revised as follows:

§ 27.14 Construction requirements; Criteria for renewal.

(a) AWS and WCS licensees, with the exception of WCS licensees holding authorizations for Block A in the 698–704 MHz and 728–734 MHz bands, Block B in the 704–710 MHz and 734–740 MHz bands, Block E in the 722–728 MHz band, Block C, C1, or C2 in the 746–757 MHz and 776–787 MHz bands, or Block D in the 758–763 MHz and 788–793 MHz bands, and with the exception of AWS licensees holding authorizations in the 1915-1920 MHz, 1995-2000 MHz, and 2155-2180 MHz bands, must, as a performance requirement, make a showing of “substantial service” in their license area within the prescribed license term set forth in §27.13. “Substantial service” is defined as service which is sound, favorable and substantially above a level of mediocre service which just might minimally warrant renewal. Failure by any licensee to meet this requirement will result in forfeiture of the license and the licensee will be ineligible to regain it.

(b) A renewal applicant involved in a comparative renewal proceeding shall receive a preference, commonly referred to as a renewal expectancy, which is the most important comparative factor to be considered in the proceeding, if its past record for the relevant license period demonstrates that:

(1) The renewal applicant has provided “substantial” service during its past license term; and

(2) The renewal applicant has substantially complied with applicable FCC rules, policies and the Communications Act of 1934, as amended.

(c) In order to establish its right to a renewal expectancy, a WCS renewal applicant involved in a comparative renewal proceeding must submit a showing explaining why it should receive a renewal expectancy. At a minimum, this showing must include:

(1) A description of its current service in terms of geographic coverage and population served;

(2) An explanation of its record of expansion, including a timetable of new construction to meet changes in demand for service;

(3) A description of its investments in its WCS system; and

(4) Copies of all FCC orders finding the licensee to have violated the Communications Act or any FCC rule or policy; and a list of any pending proceedings that relate to any matter described in this paragraph.

(d) In making its showing of entitlement to a renewal expectancy, a renewal applicant may claim credit for any system modification applications that were pending on the date it filed its renewal application. Such credit will not be allowed if the modification application is dismissed or denied.

(e) Comparative renewal proceedings do not apply to AWS licensees holding authorizations in the 1915-1920 MHz, 1995-2000 MHz, and 2155-2180 MHz bands or to WCS licensees holding authorizations for Block A in the 698–704 MHz, 728–734 MHz bands, Block B in the 704–710 MHz and 734–740 MHz bands, Block C in the 710–716 MHz and 740–746 MHz bands, Block D in the 716–722 MHz band, Block E in the 722–728 MHz band, Block C, C1, or C2 in the 746–757 MHz and 776–787 MHz bands, or Block

D in the 758–763 MHz and 788–793 MHz bands. Each of these licensees must file a renewal application in accordance with the provisions set forth in §1.949, and must make a showing of substantial service, independent of its performance requirements, as a condition for renewal at the end of each license term.

(f) Comparative renewal proceedings do not apply to WCS licensees holding authorizations for the 698–746 MHz, 747–762 MHz, and 777–792 MHz bands. These licensees must file a renewal application in accordance with the provisions set forth in §1.949 of this chapter.

(g) WCS licensees holding EA authorizations for Block A in the 698–704 MHz and 728–734 MHz bands, cellular market authorizations for Block B in the 704–710 MHz and 734–740 MHz bands, or EA authorizations for Block E in the 722–728 MHz band, if the results of the first auction in which licenses for such authorizations are offered satisfy the reserve price for the applicable block, shall provide signal coverage and offer service over at least 35 percent of the geographic area of each of their license authorizations no later than February 17, 2013 (or within four years of initial license grant if the initial authorization in a market is granted after February 17, 2009), and shall provide such service over at least 70 percent of the geographic area of each of these authorizations by the end of the license term. In applying these geographic benchmarks, licensees are not required to include land owned or administered by government as a part of the relevant service area. Licensees may count covered government land for purposes of meeting their geographic construction benchmark, but are required to add the covered government land to the total geographic area used for measurement purposes. Licensees are required to include those populated lands held by tribal governments and those held by the Federal Government in trust or for the benefit of a recognized tribe.

(1) If an EA or CMA licensee holding an authorization in these particular blocks fails to provide signal coverage and offer service over at least 35 percent of the geographic area of its license authorization by no later than February 17, 2013 (or within four years of initial license grant, if the initial authorization in a market is granted after February 17, 2009), the term of that license authorization will be reduced by two years and such licensee may be subject to enforcement action, including forfeitures. In addition, an EA or CMA licensee that provides signal coverage and offers service at a level that is below this interim benchmark may lose authority to operate in part of the remaining unserved areas of the license.

(2) If any such EA or CMA licensee fails to provide signal coverage and offer service to at least 70 percent of the geographic area of its license authorization by the end of the license term, that licensee's authorization will terminate automatically without Commission action for those geographic portions of its license in which the licensee is not providing service, and those unserved areas will become available for reassignment by the Commission. Such licensee may also be subject to enforcement action, including forfeitures. In addition, an EA or CMA licensee that provides signal coverage and offers service at a level that is below this end-of-term benchmark may be subject to license termination. In the event that a licensee's authority to operate in a license area terminates automatically without Commission action, such areas will become available for reassignment pursuant to the procedures in paragraph (j) of this section.

(3) For licenses under paragraph (g) of this section, the geographic service area to be made available for reassignment must include a contiguous area of at least 130 square kilometers (50 square miles), and areas smaller than a contiguous area of at least 130 square kilometers (50 square miles) will not be deemed unserved.

(h) WCS licensees holding REAG authorizations for Block C in the 746–757 MHz and 776–787 MHz bands or REAG authorizations for Block C2 in the 752–757 MHz and 782–787 MHz bands shall provide signal coverage and offer service over at least 40 percent of the population in each EA comprising the REAG license area no later than February 17, 2013 (or within four years of initial license grant, if the initial authorization in a market is granted after February 17, 2009), and shall provide such service over at least 75 percent of the population of each of these EAs by the end of the license term. For purposes of compliance with this requirement, licensees should determine population based on the most recently

available U.S. Census Data.

(1) If a licensee holding a Block C authorization fails to provide signal coverage and offer service over at least 40 percent of the population in each EA comprising the REAG license area by no later than February 17, 2013 (or within four years of initial license grant if the initial authorization in a market is granted after February 17, 2009), the term of the license authorization will be reduced by two years and such licensee may be subject to enforcement action, including forfeitures. In addition, a licensee that provides signal coverage and offers service at a level that is below this interim benchmark may lose authority to operate in part of the remaining unserved areas of the license.

(2) If a licensee holding a Block C authorization fails to provide signal coverage and offer service over at least 75 percent of the population in any EA comprising the REAG license area by the end of the license term, for each such EA that licensee's authorization will terminate automatically without Commission action for those geographic portions of its license in which the licensee is not providing service. Such licensee may also be subject to enforcement action, including forfeitures. In the event that a licensee's authority to operate in a license area terminates automatically without Commission action, such areas will become available for reassignment pursuant to the procedures in paragraph (j) of this section. In addition, a REAG licensee that provides signal coverage and offers service at a level that is below this end-of-term benchmark within any EA may be subject to license termination within that EA.

(3) For licenses under paragraph (h), the geographic service area to be made available for reassignment must include a contiguous area of at least 130 square kilometers (50 square miles), and areas smaller than a contiguous area of at least 130 square kilometers (50 square miles) will not be deemed unserved.

(i) WCS licensees holding EA authorizations for Block A in the 698–704 MHz and 728–734 MHz bands, cellular market authorizations for Block B in the 704–710 MHz and 734–740 MHz bands, or EA authorizations for Block E in the 722–728 MHz band, if the results of the first auction in which licenses for such authorizations in Blocks A, B, and E are offered do not satisfy the reserve price for the applicable block, as well as EA authorizations for Block C1 in the 746–752 MHz and 776–782 MHz bands, are subject to the following:

(1) If a licensee holding a cellular market area or EA authorization subject to this paragraph (i) fails to provide signal coverage and offer service over at least 40 percent of the population in its license area by no later than February 17, 2013 (or within four years of initial license grant, if the initial authorization in a market is granted after February 17, 2009), the term of that license authorization will be reduced by two years and such licensee may be subject to enforcement action, including forfeitures. In addition, such licensee that provides signal coverage and offers service at a level that is below this interim benchmark may lose authority to operate in part of the remaining unserved areas of the license. For purposes of compliance with this requirement, licensees should determine population based on the most recently available U.S. Census Data.

(2) If a licensee holding a cellular market area or EA authorization subject to this paragraph (i) fails to provide signal coverage and offer service over at least 75 percent of the population in its license area by the end of the license term, that licensee's authorization will terminate automatically without Commission action for those geographic portions of its license in which the licensee is not providing service, and those unserved areas will become available for reassignment by the Commission. Such licensee may also be subject to enforcement action, including forfeitures. In the event that a licensee's authority to operate in a license area terminates automatically without Commission action, such areas will become available for reassignment pursuant to the procedures in paragraph (j) of this section. In addition, such a licensee that provides signal coverage and offers service at a level that is below this end-of-term benchmark may be subject to license termination. For purposes of compliance with this requirement, licensees should determine population based on the most recently available U.S. Census Data.

(3) For licenses under paragraph (i), the geographic service area to be made available for reassignment must include a contiguous area of at least 130 square kilometers (50 square miles), and areas smaller than a contiguous area of at least 130 square kilometers (50 square miles) will not be deemed unserved.

(j) In the event that a licensee's authority to operate in a license area terminates automatically under paragraphs (g), (h), (i), (p) or (q) of this section, such areas will become available for reassignment pursuant to the following procedures:

(1) The Wireless Telecommunications Bureau is delegated authority to announce by public notice that these license areas will be made available and establish a 30-day window during which third parties may file license applications to serve these areas. During this 30-day period, licensees that had their authority to operate terminate automatically for unserved areas may not file applications to provide service to these areas. Applications filed by third parties that propose areas overlapping with other applications will be deemed mutually exclusive, and will be resolved through an auction. The Wireless Telecommunications Bureau, by public notice, may specify a limited period before the filing of short-form applications (FCC Form 175) during which applicants may enter into a settlement to resolve their mutual exclusivity, subject to the provisions of §1.935 of this chapter.

(2) Following this 30-day period, the original licensee and third parties can file license applications for remaining unserved areas where licenses have not been issued or for which there are no pending applications. If the original licensee or a third party files an application, that application will be placed on public notice for 30 days. If no mutually exclusive application is filed, the application will be granted, provided that a grant is found to be in the public interest. If a mutually exclusive application is filed, it will be resolved through an auction. The Wireless Telecommunications Bureau, by public notice, may specify a limited period before the filing of short-form applications (FCC Form 175) during which applicants may enter into a settlement to resolve their mutual exclusivity, subject to the provisions of §1.935 of this chapter.

(3) The licensee will have one year from the date the new license is issued to complete its construction and provide signal coverage and offer service over 100 percent of the geographic area of the new license area. If the licensee fails to meet this construction requirement, its license will automatically terminate without Commission action and it will not be eligible to apply to provide service to this area at any future date.

(k) AWS and WCS licensees holding authorizations in the spectrum blocks enumerated in paragraphs (g), (h), (i), (p), or (q) of this section, including any licensee that obtained its license pursuant to the procedures set forth in subsection (j), shall demonstrate compliance with performance requirements by filing a construction notification with the Commission, within 15 days of the expiration of the applicable benchmark, in accordance with the provisions set forth in §1.946(d). The licensee must certify whether it has met the applicable performance requirements. The licensee must file a description and certification of the areas for which it is providing service. The construction notifications must include electronic coverage maps, supporting technical documentation and any other information as the Wireless Telecommunications Bureau may prescribe by public notice.

(l) AWS and WCS licensees holding authorizations in the spectrum blocks enumerated in paragraphs (g), (h), (i), (p), or (q) of this section, excluding any licensee that obtained its license pursuant to the procedures set forth in subsection (j) of this section, shall file reports with the Commission that provide the Commission, at a minimum, with information concerning the status of their efforts to meet the performance requirements applicable to their authorizations in such spectrum blocks and the manner in which that spectrum is being utilized. The information to be reported will include the date the license term commenced, a description of the steps the licensee has taken toward meeting its construction obligations in a timely manner, including the technology or technologies and service(s) being provided, and the areas within the license area in which those services are available.

(1) Each WCS licensee holding an authorization in the spectrum blocks enumerated in paragraphs (g), (h), or (i) shall file its first report with the Commission no later than February 17, 2011 and no sooner than 30 days prior to this date. Each licensee that meets its interim benchmarks shall file a second report with the Commission no later than February 17, 2016 and no sooner than 30 days prior to this date. Each licensee that does not meet its interim benchmark shall file this second report no later than on February 17, 2015 and no sooner than 30 days prior to this date.

(2) Each AWS licensee holding an authorization in the spectrum blocks enumerated in paragraphs (p) or (q) of this section shall file its first report with the Commission no later than two years from the date on which the original license was issued and no sooner than 30 days prior to this date. Each licensee that meets its interim benchmarks shall file a second report with the Commission no later than seven years from the date on which the original license was issued and no sooner than 30 days prior to this date. Each licensee that does not meet its interim benchmark shall file this second report no later than six years from the date on which the original license was issued and no sooner than 30 days prior to this date.

(m) The WCS licensee holding the authorization for the D Block in the 758–763 MHz and 788–793 MHz bands (the Upper 700 MHz D Block licensee) shall comply with the following construction requirements.

(1) The Upper 700 MHz D Block licensee shall provide a signal coverage and offer service over at least 75 percent of the population of the nationwide Upper 700 MHz D Block license area within four years from February 17, 2009, 95 percent of the population of the nationwide license area within seven years, and 99.3 percent of the population of the nationwide license area within ten years.

(2) The Upper 700 MHz D Block licensee may modify, to a limited degree, its population-based construction benchmarks with the agreement of the Public Safety Broadband Licensee and the prior approval of the Commission, where such a modification would better serve to meet commercial and public safety needs.

(3) The Upper 700 MHz D Block licensee shall meet the population benchmarks based on a performance schedule specified in the Network Sharing Agreement, taking into account performance pursuant to §27.1327 as appropriate under that rule, and using the most recently available U.S. Census Data. The network and signal levels employed to meet these benchmarks must be adequate for public safety use, as defined in the Network Sharing Agreement, and the services made available must include those appropriate for public safety entities that operate in those areas. The schedule shall include coverage for major highways and interstates, as well as such additional areas that are necessary to provide coverage for all incorporated communities with a population in excess of 3,000, unless the Public Safety Broadband Licensee and the Upper 700 MHz D Block licensee jointly determine, in consultation with a relevant community, that such additional coverage will not provide significant public benefit.

(4) The Upper 700 MHz D Block licensee shall demonstrate compliance with performance requirements by filing a construction notification with the Commission within 15 days of the expiration of the applicable benchmark, in accordance with the provisions set forth in §1.946(d) of this chapter. The licensee must certify whether it has met the applicable performance requirement and must file a description and certification of the areas for which it is providing service. The construction notifications must include the following:

(i) Certifications of the areas that were scheduled for construction and service by that date under the Network Sharing Agreement for which it is providing service, the type of service it is providing for each area, and the type of technology it is utilizing to provide this service.

(ii) Electronic coverage maps and supporting technical documentation providing the assumptions used by the licensee to create the coverage maps, including the propagation model and the signal strength

necessary to provide service.

(n) At the end of its license term, the Upper 700 MHz D Block licensee must, in order to renew its license, make a showing of its success in meeting the material requirements set forth in the Network Sharing Agreement as well as all other license conditions, including the performance benchmark requirements set forth in this section.

(p) AWS licensees holding authorizations in the 1915-1920 MHz and 1995-2000 MHz shall provide signal coverage and offer service to at least 35 percent of the population in each licensed area within four years of the date on which the original license was issued and at least 70 percent of the population in each licensed area at the end of the license term.

(1) If any AWS licensee holding an authorization in the 1915-1920 MHz and 1995-2000 MHz bands fails to provide signal coverage and offer service to at least 35 percent of the population in the licensed area within four years of the date on which the original license was issued, the term of that license authorization will be reduced by two years and such licensee may be subject to enforcement action, including forfeitures. In addition, the licensee may lose authority to operate in part of the remaining unserved areas of the license.

(2) If any AWS licensee holding an authorization in the 1915-1920 MHz and 1995-2000 MHz fails to provide signal coverage and offer service to at least 70 percent of the population in each licensed area at the end of the license term, that licensee's authorization will terminate automatically without Commission action for those geographic portions of its license in which the licensee is not providing service, and those unserved areas will become available for reassignment by the Commission. Such licensee may also be subject to enforcement action, including forfeitures. In addition, a licensee that provides signal coverage and offers service at a level that is below the end-of-term benchmark may be subject to license termination. In the event that a licensee's authority to operate in a license area terminates automatically without Commission action, such areas will become available for reassignment pursuant to the procedures in paragraph (j) of this subsection.

(3) For licenses under paragraphs (g), (h), and (i), the geographic service area to be made available to new entrants must include a contiguous area of at least 130 square kilometers (50 square miles), and areas smaller than a contiguous area of at least 130 square kilometers (50 square miles) will not be deemed unserved.

(4) To demonstrate compliance with these performance requirements, licensees shall use the most recently available U.S. Census Data at the time of measurement and shall base their measurements of population served on areas no larger than the Census Tract level. The population within a specific Census Tract (or other acceptable identifier) will only be deemed served by the licensee if it provides signal coverage to and offers service within the specific Census Tract (or other acceptable identifier). To the extent the Census Tract (or other acceptable identifier) extends beyond the boundaries of a license area, a licensee with authorizations for such areas may only include the population within the Census Tract (or other acceptable identifier) towards meeting the performance requirement of a single, individual license.

(q) Any AWS licensee holding an authorization in the 2155-2180 MHz band shall provide signal coverage and offer service to at least 50 percent of the total U.S. population within four years of the date on which the original license was issued and at least 95 percent of the total U.S. population at the end of the license term. If any licensee in this band elects not to meet its performance requirements based on the percent of the U.S. population served, it shall provide signal coverage and offer service to at least 35 percent of the population in each Cellular Market Area (CMA) or Economic Area (EA) in its licensed area within four years and at least 70 percent of the population in each CMA or EA in its licensed area at the end of the license term.

(1) If any AWS licensee holding an authorization in the 2155-2180 MHz band fails to establish that it meets the applicable performance requirement within four years of the date on which the original license was issued, the term of that license authorization will be reduced by two years and such licensee may be subject to enforcement action, including forfeitures. In addition, the licensee may lose authority to operate in part of the remaining unserved areas of the license.

(2) If any AWS licensee holding an authorization in the 2155-2180 MHz band fails to establish that it meets the applicable performance requirement at the end of the license term, that licensee's authorization will terminate automatically without Commission action for those geographic portions of its license in which the licensee is not providing service, and those unserved areas will become available for reassignment by the Commission. Such licensee may also be subject to enforcement action, including forfeitures. In addition, a licensee that provides signal coverage and offers service at a level that is below the end-of-term benchmark may be subject to license termination. In the event that a licensee's authority to operate in a license area terminates automatically without Commission action, such areas will become available for reassignment pursuant to the procedures in paragraph (j) of this subsection.

9. Section 27.15 is revised as follows:

§ 27.15 Geographic partitioning and spectrum disaggregation.

(a) Eligibility. (1) Parties seeking approval for partitioning and disaggregation shall request from the Commission an authorization for partial assignment of a license pursuant to §1.948.

(2) AWS and WCS licensees may apply to partition their licensed geographic service area or disaggregate their licensed spectrum at any time following the grant of their licenses.

(b) Technical Standards —(1) Partitioning. In the case of partitioning, applicants and licensees must file FCC Form 603 pursuant to section 1.948 and list the partitioned service area on a schedule to the application. The geographic coordinates must be specified in degrees, minutes, and seconds to the nearest second of latitude and longitude and must be based upon the 1983 North American Datum (NAD83).

(2) Disaggregation. Spectrum may be disaggregated in any amount.

(3) Combined partitioning and disaggregation. The Commission will consider requests for partial assignment of licenses that propose combinations of partitioning and disaggregation.

(4) Signal levels. For purposes of partitioning and disaggregation, part 27 systems must be designed so as not to exceed the signal level specified for the particular spectrum block in §27.55 at the licensee's service area boundary, unless the affected adjacent service area licensees have agreed to a different signal level.

(c) License term. The license term for a partitioned license area and for disaggregated spectrum shall be the remainder of the original licensee's license term as provided for in §27.13.

(d) Compliance with construction requirements —(1) Partitioning. (i) Except for AWS licensees in the 1915-1920 MHz, 1995-2000 MHz, and 2155-2180 MHz bands and WCS licensees holding authorizations for Block A in the 698-704 MHz and 728-734 MHz bands, Block B in the 704-710 MHz and 734-740 MHz bands, Block E in the 722-728 MHz band, Blocks C, C1, or C2 in the 746-757 MHz and 776-787 MHz bands, or Block D in the 758-763 MHz and 788-793 MHz bands, the following rules apply to WCS and AWS licensees holding authorizations for purposes of implementing the construction requirements set forth in §27.14. Parties to partitioning agreements have two options for satisfying the construction requirements set forth in §27.14. Under the first option, the partitioner and partitionee each certifies that it

will independently satisfy the substantial service requirement for its respective partitioned area. If a licensee subsequently fails to meet its substantial service requirement, its license will be subject to automatic cancellation without further Commission action. Under the section option, the partitioner certifies that it has met or will meet the substantial service requirement for the entire, pre-partitioned geographic service area. If the partitioner subsequently fails to meet its substantial service requirement, only its license will be subject to automatic cancellation without further Commission action.

(ii) For AWS licensees in the 1915-1920 MHz, 1995-2000 MHz, and 2155-2180 MHz bands and WCS licensees holding authorizations for Block A in the 698-704 MHz and 728-734 MHz bands, Block B in the 704-710 MHz and 734-740 MHz bands, Block E in the 722-728 MHz band, or Blocks C, C1, and C2 in the 746-757 MHz and 776-787 MHz bands, the following rules apply for purposes of implementing the construction requirements set forth in §27.14. Parties to partitioning agreements have two options for satisfying the construction requirements set forth in §27.14. Under the first option, the partitioner and partitionee each certifies that they will collectively share responsibility for meeting the construction requirement for the entire pre-partition geographic license area. If the partitioner and partitionee collectively fail to meet the construction requirement, then both the partitioner and partitionee will be subject to the consequences enumerated in §27.14(g) and (h) for this failure. Under the second option, the partitioner and partitionee each certifies that it will independently meet the construction requirement for its respective partitioned license area. If the partitioner or partitionee fails to meet the construction requirement for its respective partitioned license area, then the consequences for this failure shall be those enumerated in §27.14(g) and (h).

(2) Disaggregation . (i) Except for AWS licensees in the 1915-1920 MHz, 1995-2000 MHz, and 2155-2180 MHz bands and WCS licensees holding authorizations for Block A in the 698-704 MHz and 728-734 MHz bands, Block B in the 704-710 MHz and 734-740 MHz bands, Block E in the 722-728 MHz band, Blocks C, C1, or C2 in the 746-757 MHz and 776-787 MHz bands, or Block D in the 758-763 MHz and 788-793 MHz bands, the following rules apply to WCS and AWS licensees holding authorizations for purposes of implementing the construction requirements set forth in §27.14. Parties to disaggregation agreements have two options for satisfying the construction requirements set forth in §27.14. Under the first option, the disaggregator and disaggregatee each certifies that it will share responsibility for meeting the substantial service requirement for the geographic service area. If the parties choose this option and either party subsequently fails to satisfy its substantial service responsibility, both parties' licenses will be subject to forfeiture without further Commission action. Under the second option, both parties certify either that the disaggregator or the disaggregatee will meet the substantial service requirement for the geographic service area. If the parties choose this option, and the party responsible subsequently fails to meet the substantial service requirement, only that party's license will be subject to forfeiture without further Commission action.

(ii) For AWS licensees in the 1915-1920 MHz, 1995-2000 MHz, and 2155-2180 MHz bands and WCS licensees holding authorizations for Block A in the 698-704 MHz and 728-734 MHz bands, Block B in the 704-710 MHz and 734-740 MHz bands, Block E in the 722-728 MHz band, and Blocks C, C1, or C2 in the 746-757 MHz and 776-787 MHz bands, the following rules apply for purposes of implementing the construction requirements set forth in §27.14. If either the disaggregator or the disaggregatee meets the construction requirements set forth in §27.14, then these requirements will be considered to be satisfied for both parties. If neither the disaggregator nor the disaggregatee meets the construction requirements, then both parties will be subject to the consequences enumerated in §27.14(g) and (h) for this failure.

10. Section 27.16 is revised as follows:

§ 27.16. Network access requirements for Block C in the 746–757 and 776–787 MHz bands and for the 2155–2180 MHz band (the AWS-3 Band).

(a) *Applicability.* This section shall apply only to the authorizations for Block C in the 746–757 and 776–787 MHz bands (700 C Block) assigned as a result of Auction 73 and to the 2155–2180 MHz band (AWS-3 Band).

(b) *Use of devices and applications.* Licensees offering service on the 700 C Block and the licensee offering premium or paid services on the AWS-3 Band subject to this section shall not deny, limit, or restrict the ability of their customers to use the devices and applications of their choice on the licensee's network, and the licensee providing free broadband service on the AWS-3 band subject to this section shall not deny, limit, or restrict the ability of their customers to use the devices of their choice on the licensee's network, except:

(1) Insofar as such use would not be compliant with published technical standards reasonably necessary for the management or protection of the licensee's network,

(2) licensees or lessees providing free broadband service required under § 27.1192 of this part shall not deny, limit, or restrict the ability of users to use the devices of their choice on the licensee's or lessee's network, or

(3) As required to comply with statute or applicable government regulation.

(c) *Technical standards.* For purposes of paragraph (b)(1) of this section:

(1) Standards shall include technical requirements reasonably necessary for third parties to access a licensee's network via devices or applications without causing objectionable interference to other spectrum users or jeopardizing network security. The potential for excessive bandwidth demand alone shall not constitute grounds for denying, limiting or restricting access to the network, except as provided in § 27.1192(a)(2) of this part for the AWS-3 Band.

(2) To the extent a licensee relies on standards established by an independent standards-setting body which is open to participation by representatives of service providers, equipment manufacturers, application developers, consumer organizations, and other interested parties, the standards will carry a presumption of reasonableness.

(3) A licensee shall publish its technical standards, which shall be non-proprietary, no later than the time at which it makes such standards available to any preferred vendors, so that the standards are readily available to customers, equipment manufacturers, application developers, and other parties interested in using or developing products for use on a licensee's networks.

(d) *Access requests.* (1) Licensees shall establish and publish clear and reasonable procedures for parties to seek approval to use devices or applications on the licensees' networks. A licensee must also provide to potential customers notice of the customers' rights to request the attachment of a device or application to the licensee's network, and notice of the licensee's process for customers to make such requests, including the relevant network criteria.

(2) If a licensee determines that a request for access would violate its technical standards or regulatory requirements, the licensee shall expeditiously provide a written response to the requester specifying the basis for denying access and providing an opportunity for the requester to modify its request to satisfy the licensee's concerns.

11. Section 27.50(d) is revised to read as follows:

§ 27.50 Power and antenna height limits.

* * * * *

(d) The following power and antenna height requirements apply to stations transmitting in the 1710-1755 MHz, 1915-1920 MHz, 1995-2000 MHz, and 2110-2180 MHz bands:

(1) The power of each fixed or base station transmitting in the 1995-2000 MHz and 2110-2155 MHz bands and each base or downlink fixed station transmitting in the 2155-2180 MHz band, and located in any county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, is limited to:

(A) an equivalent isotropically radiated power (EIRP) of 3280 watts when transmitting with an emission bandwidth of 1 MHz or less;

(B) an EIRP of 3280 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.

(2) The power of each fixed or base station transmitting in the 1995-2000 MHz and 2110-2155 MHz band and each base or downlink fixed station transmitting in the 2155-2180 MHz band, and located in any geographic location other than that described in paragraph (d)(1) is limited to:

(A) an equivalent isotropically radiated power (EIRP) of 1640 watts when transmitting with an emission bandwidth of 1 MHz or less;

(B) an EIRP of 1640 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.

(3) A licensee operating a base or fixed station in the 2110-2155 MHz band or a base or downlink fixed station in the 2155-2180 MHz band and utilizing a power greater than 1640 watts EIRP and greater than 1640 watts/MHz EIRP must coordinate such operations in advance with the following licensees authorized to operate within 120 kilometers (75 miles) of the base or fixed station operating in this band: all Government and non-Government satellite entities in the 2025-2110 MHz band; all Broadband Radio Service (BRS) licensees authorized under Part 27 in the 2155-2160 MHz band; and all advanced wireless services (AWS) licensees authorized to operate on adjacent frequency blocks in the 2110-2180 MHz band.

(4) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band are limited to 1 watt (W) EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in the 1915-1920 MHz and 2155-2180 MHz bands are limited to 200 milliwatts/MHz (mW/MHz) peak EIRP. Uplink fixed stations operating in the 1915-1920 MHz and 2155-2180 MHz bands are limited to 2 watts/MHz (W/MHz) peak EIRP. Mobile and portable stations operating in the 1710-1755 MHz, 1915-1920 MHz, and 2155-2180 MHz bands must employ a means for limiting power to the minimum necessary for successful communications.

(5) Equipment employed must be authorized in accordance with the provisions of Sec. 27.51. Except for mobile, portable, and uplink fixed stations operating in the 1915-1920 MHz and 2155-2180 MHz bands, power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph

(d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

(6) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an RMS-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, *etc.*, so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

* * * * *

12. Paragraph (h) of Section 27.53 is revised as follows:

§ 27.53 Emission limits.

(h) For operations in the 1710-1755 MHz, 1915-1920 MHz, 1995-2000 MHz, and 2110-2180 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated in accordance with the following:

(1) For all operations in the 1710-1755 MHz, 1995-2000 MHz, and 2110-2155 MHz bands and for all base and downlink fixed station operations in the 2155-2180 MHz band, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB;

(2) For all mobile, portable, and uplink fixed station operations in the 2155-2180 MHz band, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $60 + 10 \log_{10}(P)$ dB;

(3) For all operations in the 1915-1920 MHz band, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB and the power of any emission on frequencies above 1930 MHz shall be attenuated below the transmitter power (P) by at least $90 + 10 \log_{10}(P)$ dB;

(4) Compliance with these provisions are based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power;

(5) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits;

(6) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

* * * * *

13. Section 27.55 (title and text) is revised as follows:

§ 27.55 Power strength limits.

(a) Field strength limits. For the following bands, the predicted or measured median field strength at any location on the geographical border of a licensee's service area shall not exceed the value specified unless the adjacent affected service area licensee(s) agree(s) to a different field strength. This value applies to both the initially offered service areas and to partitioned service areas.

(1) 1995-2000, 2110-2180, 2305-2320 and 2345-2360 MHz bands: 47 dB μ V/m.

(2) 698-758 and 775-787 MHz bands: 40 dB μ V/m.

(3) The paired 1392-1395 MHz and 1432-1435 MHz bands and the unpaired 1390-1392 MHz band (1.4 GHz band): 47 dB μ V/m.

(4) BRS and EBS: The predicted or measured median field strength at any location on the geographical border of a licensee's service area shall not exceed the value specified unless the adjacent affected service area licensee(s) agree(s) to a different field strength. This value applies to both the initially offered services areas and to partitioned services areas. Licensees may exceed this signal level where there is no affected licensee that is constructed and providing service. Once the affected licensee is providing service, the original licensee will be required to take whatever steps necessary to comply with the applicable power level at its GSA boundary, absent consent from the affected licensee.

(i) Prior to transition, the signal strength at any point along the licensee's GSA boundary does not exceed the greater of that permitted under the licensee's Commission authorizations as of January 10, 2005 or 47 dB μ V/m.

(ii) Following transition, for stations in the LBS and UBS, the signal strength at any point along the licensee's GSA boundary must not exceed 47 dB μ V/m. This field strength is to be measured at 1.5 meters above the ground over the channel bandwidth (i.e. , each 5.5 MHz channel for licensees that hold a full channel block, and for the 5.5 MHz channel for licensees that hold individual channels).

(iii) Following transition, for stations in the MBS, the signal strength at any point along the licensee's GSA boundary must not exceed the greater of $-73.0 + 10 \log(X/6)$ dBW/m² , where X is the bandwidth in megahertz of the channel, or for facilities that are substantially similar to the licensee's pre-transition facilities (including modifications that do not alter the fundamental nature or use of the transmissions), the signal strength at such point that resulted from the station's operations immediately prior to the transition, provided that such operations complied with paragraph (a)(4)(i) of this section.

(b) Power flux density limit for stations operating in the 698-746 MHz bands. For base and fixed stations operating in the 698-746 MHz band in accordance with the provisions of §27.50(c)(6), the power flux density that would be produced by such stations through a combination of antenna height and vertical gain pattern must not exceed 3000 microwatts per square meter on the ground over the area extending to 1 km from the base of the antenna mounting structure.

(c) Power flux density limit for stations operating in the 746-757 MHz, 758-763 MHz, 776-787 MHz, and 788-793 MHz bands. For base and fixed stations operating in the 746-757 MHz, 758-763 MHz, 776-787 MHz, and 788-793 MHz bands in accordance with the provisions of §27.50(b)(6), the power flux density that would be produced by such stations through a combination of antenna height and vertical gain pattern must not exceed 3000 microwatts per square meter on the ground over the area extending to 1 km from the base of the antenna mounting structure.

Subpart L—1710-1755 MHz, 2110-2155 MHz, 2160-2180 MHz Bands

* * *

14. Add new § 27.1191 with new subheading as follows:

SPECIAL PROVISIONS GOVERNING THE 2155-2180 MHz BAND

§ 27.1191 Free wireless broadband service requirement in the 2155-2180 MHz band.

(a) *Applicability.* This section shall apply only to an authorization in the 2155-2180 MHz "AWS-3" band.

(b) *Provision of free broadband service.* A licensee (including lessees) offering any service on spectrum subject to this section must utilize up to twenty-five percent of its AWS-3 wireless network capacity to provide free two-way wireless broadband Internet service ("free broadband service") at a minimum engineered data rate of 768 kbps downstream per user.

(1) To the extent that a licensee meets all demand for the free broadband service and is providing such service at a minimum engineered data rate of 768 kbps downstream per user, such licensee can utilize more than seventy-five percent of its wireless network capacity for any other service authorized to operate in this band.

(2) On a per base-station or per market basis, a 2155-2180 MHz licensee will not be required to maintain the minimum data rate when and where meeting additional demand for the free broadband service would require more than twenty-five percent of wireless network capacity. Once demand reaches twenty-five percent of wireless network capacity, a 2155-2180 MHz licensee has the discretion to manage any additional demand for free service using any lawful network management protocol.

(3) Broadband users not required to pay any compensation for any of the broadband services that they receive are considered to receive free broadband service. If a broadband user pays any compensation for any broadband service directly or indirectly affiliated with the licensee, the user does not receive free service. For purposes of this requirement, wireless broadband users receive either free or fee-based service, not both. The compensation paid for broadband service does not include any compensation paid for user/customer equipment. A minimum engineered data rate means that the wireless network is designed, constructed, and implemented to provide meet or exceed the minimum data rate as measured to/from user devices and the AWS-3 licensee's wireless facilities. The minimum engineered data rate is subject to future re-assessments by the Commission, including during the term of the license.

(c) *Availability of free broadband service.* A 2155-2180 MHz licensee must make available free broadband service whenever and wherever the licensee offers any other service that uses AWS-3 spectrum (even if other such services are offered prior to the performance deadlines set forth in § 27.14 for the AWS-3 band).

(d) *Geographic partitioning, spectrum disaggregation, license assignment, and transfer.* A licensee is not restricted from assigning, transferring, partitioning, or leasing 2155-2180 MHz spectrum. In such case, the free broadband requirement would apply to the licensee's or lessee's network in the AWS-3 band.

(e) *User equipment.* A 2155-2180 MHz licensee and/or third party vendor is authorized to determine user/customer equipment pricing, features, and availability, so long as such determinations are reasonable and non-discriminatory and in compliance with Section 27.16.

(f) *Fee-based services.* Subject to the provisions in this section, a 2155-2180 MHz licensee may provide and prioritize fee-based services as set forth in paragraph (b). Users and use of the wireless network for any fee-based service may not be counted towards satisfaction of the requirement to provide free broadband service.

(g) *Fee-based broadband services provided by non-facilities based wholesale customers of a 2155-2180 MHz licensee.* Fee-based broadband services provided by non-facilities based wholesale customers of a 2155-2180 MHz licensee that use such licensee's network capacity is not required to provide free broadband service, although such use of the licensee's network capacity shall be included in any determination of the licensee's compliance with the free broadband service requirement.

(h) *Burden of proof.* Once a complainant sets forth a *prima facie* case that a 2155-2180 MHz licensee is in violation of the free broadband service requirement, such licensee shall have the burden of proof to demonstrate that it is in compliance. Application of the same lawful network management protocol utilized by the licensee to manage fee-based traffic is presumptively reasonable.

15. Add new § 27.1193 to read as follows:

§ 27.1193 Content Network Filtering Requirement.

(a) The licensee of the 2155-2188 MHz band (AWS-3 licensee) must provide as part of its free broadband service a network-based mechanism:

(1) That filters or blocks images and text that constitute obscenity or pornography and, in context, as measured by contemporary community standards and existing law, any images or text that otherwise would be harmful to teens and adolescents. For purposes of this rule, teens and adolescents are children 5 through 17 years of age;

(2) That must be active at all times on any type of free broadband service offered to customers or consumers through an AWS-3 network. In complying with this requirement, the AWS-3 licensee must use viewpoint-neutral means in instituting the filtering mechanism and must otherwise subject its own content—including carrier-generated advertising—to the filtering mechanism.

(b) The AWS-3 licensee must:

(1) inform new customers that the filtering is in place and must otherwise provide on-screen notice to users. It may also choose additional means to keep the public informed of the filtering, such as storefront or website notices;

(2) use best efforts to employ filtering to protect children from exposure to inappropriate material as defined in paragraph (a)(1). Should any commercially-available network filters installed not be capable of reviewing certain types of communications, such as peer-to-peer file sharing, the licensee may use other means, such as limiting access to those types of communications as part of the AWS-3 free broadband service, to ensure that inappropriate content as defined in paragraph (a)(1) not be accessible as part of the service.

Part 74 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

**PART 74 – EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCASTING AND OTHER
PROGRAM DISTRIBUTIONAL SERVICES**

16. The authority citation for Part 74 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 303, 307, 336(f), 336(h) and 554.

17. Paragraph (a) of Section 74.690 is revised as follows and a new paragraph (f) is added as follows:

§ 74.690 Transition of the 1990-2025 MHz band from the Broadcast Auxiliary Service to emerging technologies

(a) New Entrants are collectively defined as those licensees proposing to use emerging technologies to implement Mobile Satellite Services in the 2000-2020 MHz band (MSS licensees), those licensees authorized after July 1, 2004 to implement new Fixed and Mobile services in the 1990-1995 MHz band, and those licensees authorized after September 9, 2004 in the 1995-2000 MHz and 2020-2025 MHz bands. New entrants may negotiate with Broadcast Auxiliary Service licensees operating on a primary basis and fixed service licensees operating on a primary basis in the 1990-2025 MHz band (Existing Licensees) for the purpose of agreeing to terms under which the Existing Licensees would relocate their operations to the 2025-2110 MHz band, to other authorized bands, or to other media; or, alternatively, would discontinue use of the 1990-2025 MHz band. New Entrants in the 2020-2025 MHz band are subject to the specific relocation procedures adopted in WT Docket 04-356.

(b) An Existing Licensee in the 1990-2025 MHz band allocated for licensed emerging technology services will maintain primary status in the band until the Existing Licensee's operations are relocated by a New Entrant, are discontinued under the terms of paragraph (a) of this section, or become secondary under the terms of paragraphs (e)(6) or (f)(1)(a) of this section or the Existing Licensee indicates to a New Entrant that it declines to be relocated.

(c) The Commission will amend the operating license of the Existing Licensee to secondary status only if the following requirements are met:

(1) The service applicant, provider, licensee, or representative using an emerging technology guarantees payment of all relocation costs, including all engineering, equipment, site and FCC fees, as well as any reasonable additional costs that the relocated Existing Licensee might incur as a result of operation in another authorized band or migration to another medium;

(2) The New Entrant completes all activities necessary for implementing the replacement facilities, including engineering and cost analysis of the relocation procedure and, if radio facilities are used, identifying and obtaining, on the incumbents' behalf, new microwave or Local Television Transmission Service frequencies and frequency coordination.

(3) The New Entrant builds the replacement system and tests it for comparability with the existing system.

(d) The Existing Licensee is not required to relocate until the alternative facilities are available to it for a reasonable time to make adjustments, determine comparability, and ensure a seamless handoff. If, within one year after the relocation to new facilities the Existing Licensee demonstrates that the new facilities are not comparable to the former facilities, the New Entrant must remedy the defects.

(e) Subject to the terms of this paragraph (e), the relocation of Existing Licensees will be carried out by

MSS licensees in the following manner:

(1) Existing Licensees and MSS licensees may negotiate individually or collectively for relocation of Existing Licensees to one of the channel plans specified in § 74.602(a)(3) of this chapter. Parties may not decline to negotiate, though Existing Licensees may decline to be relocated.

(i) MSS licensees must relocate all Existing Licensees in Nielsen Designated Market Areas (DMAs) 1-30, as such DMAs existed on September 6, 2000, and all fixed stations operating in the 1990-2025 MHz band on a primary basis, prior to beginning operations, except those Existing Licensees that decline relocation. Such relocation negotiations shall be conducted as "mandatory negotiations," as that term is used in § 101.73 of this chapter. If these parties are unable to reach a negotiated agreement, MSS Licensees may involuntarily relocate such Existing Licensees and fixed stations after December 8, 2004.

(ii) [Reserved]

(iii) On the date that the first MSS licensee begins operations in the 2000- 2020 MHz band, a one-year mandatory negotiation period begins between MSS licensees and Existing Licensees in Nielsen DMAs 31-210, as such DMAs existed on September 6, 2000. After the end of the mandatory negotiation period, MSS licensees may involuntarily relocate any Existing Licensees with which they have been unable to reach a negotiated agreement. As described elsewhere in this paragraph (e), MSS Licensees are obligated to relocate these Existing Licensees within the specified three- and five-year time periods.

(2) Before negotiating with MSS licensees, Existing Licensees in Nielsen Designated Market Areas where there is a BAS frequency coordinator must coordinate and select a band plan for the market area. If an Existing Licensee wishes to operate in the 2025-2110 MHz band using the channels A03-A07 as specified in the Table in § 74.602(a) of this part, then all licensees within that Existing Licensee's market must agree to such operation and all must operate on a secondary basis to any licensee operating on the channel plan specified in § 74.602(a)(3) of this part. All negotiations must produce solutions that adhere to the market area's band plan.

(3) [Reserved]

(4) [Reserved]

(5) As of the date the first MSS licensee begins operations in the 1990-2025 MHz band, MSS Licensees must relocate Existing Licensees in DMAs 31-100, as they existed as of September 6, 2000, within three years, and in the remaining DMAs, as they existed as of September 6, 2000, within five years.

(6) On December 9, 2013, all Existing Licensees will become secondary in the 1990-2025 MHz band. Upon written demand by any MSS licensee, Existing Licensees must cease operations in the 1990-2025 MHz band within six months.

(f) The 1995-2000 MHz band is allocated for Advanced Wireless Services (AWS). AWS licensees in this band are New Entrants as defined in paragraph (a) of this section and therefore must comply with sections (a), (b), (c), (d), and (f) of this section to the extent AWS entrants seek to relocate Broadcast Auxiliary Service licensees operating on a primary basis and fixed service licensees operating on a primary basis in the 1990-2025 MHz band (Existing Licensees).

(1) New entrants are required to protect Existing Licensees in this band from interference.

(i) An AWS licensee may not begin operations in a specific Nielsen Designated Market Area (DMA) until all incumbent operations in that DMA have been either (1) relocated by an MSS licensee, an AWS entrant, or another licensee; or (2) discontinued pursuant to the terms of paragraph (a) of this

section. If Existing Licensees remain in the band after December 9, 2013, they must cease operations within six months of receiving a written demand from either an MSS licensee or an AWS licensee.

(ii) An AWS licensee in this band is required conform to the technical criteria specified in TIA Bulletin TSB 10-F, or procedures other than TSB 10-F that follow generally acceptable good engineering practices pursuant to § 101.105(c) of this chapter, to determine whether its operations in the 1995-2000 MHz band would cause interference to the operations of Existing Licensees in the 1990-2025 MHz band. To the extent that the TSB 10-F demonstrates that an AWS licensee may cause interference to Existing Licensees in an adjacent DMA, the AWS licensee must either relocate the Existing Licensees or revise its proposed operations to ensure, in accordance with the technical criteria in the TSB 10-F, that its revised operations will not cause interference to Existing Licensees in adjacent DMAs.

(2) If a specific DMA has not yet been cleared and an AWS licensee seeks to begin operations in the specific DMA, an AWS licensee may negotiate with an Existing Licensee for the purpose of agreeing to terms under which the Existing Licensees would relocate their operations to one of the channel plans specified in § 74.602(a)(3) of this chapter, to other authorized bands, or to other media; or, alternatively, would discontinue use of the 1990-2025 MHz band. An AWS licensee may negotiate individually or collectively for relocation of Existing Licensees, but the AWS licensee is required to coordinate its anticipated clearance schedule with other New Entrants. New entrants are expected to work cooperatively with all interested parties to avoid duplicative efforts and undue delay in the negotiation and transition process. Parties may not decline to negotiate, though Existing Licensees may decline to be relocated. The good faith provisions set-forth in § 101.73 of this chapter apply throughout the negotiation and relocation process.

(3) If a mandatory negotiation period for or an involuntary relocation of Existing Licensees in a particular DMA has already been triggered pursuant to paragraph (e) of this section or pursuant to provisions set-forth elsewhere in this chapter or by order in WT Docket 02-55, ET Docket 00-258, or ET Docket 95-18, an AWS licensee seeking to operate in that particular DMA will not trigger a new negotiation or involuntary relocation schedule pursuant to this section. If such has not occurred with respect to a specific DMA, the following shall apply to AWS licensees at 1995-2000 MHz:

(i) Existing Licensees in DMAs 1-30, as such DMAs existed on September 6, 2000, are subject to involuntary relocation. Under involuntary relocation, the Existing Licensees are required to relocate providing that the New Entrant complies with the requirements set-forth in paragraph (c) of this section and furnishes Existing Licensees with comparable facilities, as defined in § 101.75 (b) of this chapter.

(ii) For the remaining DMAs, as such DMAs existed on September 6, 2000, a one-year mandatory negotiation period will commence between Existing Licensees and New Entrants (if such has not already occurred or been triggered) when an AWS licensee approaches any Existing Licensee operating in the specific DMA. Mandatory negotiations shall be conducted in accordance with the good faith provisions set-forth in § 101.73 of this chapter with the goal of providing the Existing Licensees with comparable facilities, as defined in § 101.73(d)(1)-(3) of this chapter. After the end of the mandatory negotiation period, an AWS licensee may involuntarily relocate any Existing Licensees with which they have been unable to reach a negotiated agreement.

(iii) To the extent the Commission adopts an earlier transition date to relocate Existing Licensees in a specific DMA in WT Docket 02-55, ET Docket 00-258, or ET Docket 95-18, AWS licensees and Existing Licensees shall comply with the requirements set-forth and adopted in those proceedings.

Part 78 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 78—CABLE TELEVISION RELAY SERVICE

18. The authority citation for Part 78 continues to read as follows:

AUTHORITY: 47 U.S.C. Secs. 2, 3, 4, 301, 303, 307, 308, 309, 48 Stat., as amended, 1064, 1065, 1066, 1081, 1082, 1083, 1084, 1085; 47 U.S.C. 152, 153, 154, 301, 303, 307, 308, 309.

19. Section 78.40 is revised as follows:

§ 78.40 Transition of the 1990-2025 MHz band from the Cable Television Relay Service to Emerging Technologies.

(a) New Entrants are collectively defined as those licensees proposing to use emerging technologies to implement Mobile Satellite Services in the 2000-2020 MHz band (MSS licensees), those licensees authorized after July 1, 2004 to implement new Fixed and Mobile services in the 1990-1995 MHz band, and those licensees authorized after September 9, 2004 in the 1995-2000 MHz and 2020-2025 MHz bands. New entrants may negotiate with Cable Television Relay Service licensees operating on a primary basis and fixed service licensees operating on a primary basis in the 1990-2025 MHz band (Existing Licensees) for the purpose of agreeing to terms under which the Existing Licensees would relocate their operations to the 2025-2110 MHz band, to other authorized bands, or to other media; or, alternatively, would accept a sharing arrangement with the New Entrants that may result in an otherwise impermissible level of interference to the Existing Licensee's operations. New Entrants in the 2020-2025 MHz band are subject to the specific relocation procedures adopted in WT Docket 04-356.

(b) Existing Licensees in the 1990-2025 MHz band allocated for licensed emerging technology services will maintain primary status in the band until a New Entrant completes relocation of the Existing Licensee's operations. Existing Licensee indicates to a New Entrant that it declines to be relocated, become secondary under the terms of paragraphs (f)(6) or (g)(1)(a) of this section.

(c) The Commission will amend the operating license of the Existing Licensee to secondary status only if the following requirements are met:

(1) The service applicant, provider, licensee, or representative using an emerging technology guarantees payment of all relocation costs, including all engineering, equipment, site and FCC fees, as well as any reasonable additional costs that the relocated Existing Licensee might incur as a result of operation in another authorized band or migration to another medium;

(2) The New Entrant completes all activities necessary for implementing the replacement facilities, including engineering and cost analysis of the relocation procedure and, if radio facilities are used, identifying and obtaining, on the incumbents' behalf, new microwave or Cable Television Relay Service frequencies and frequency coordination.

(3) The New Entrant builds the replacement system and tests it for comparability with the existing system.

(d) The Existing Licensee is not required to relocate until the alternative facilities are available to it for a reasonable time to make adjustments, determine comparability, and ensure a seamless handoff.

(e) If, within one year after the relocation to new facilities the Existing Licensee demonstrates that the new facilities are not comparable to the former facilities, the New Entrant must remedy the defect.

(f) Subject to the terms of this paragraph (f), the relocation of Existing Licensees will be carried out by MSS licensees in the following manner:

(1) Existing Licensees and MSS licensees may negotiate individually or collectively for relocation of Existing Licensees to one of the channel plans specified in § 74.602(a)(3) of this part. Parties may not decline to negotiate, though Existing Licensees may decline to be relocated.

(i) MSS licensees must relocate all Existing Licensees in Nielsen Designated Market Areas (DMAs) 1-30, as such DMAs existed on September 6, 2000, prior to beginning operations, except those Existing Licensees that decline relocation. Such relocation negotiations shall be conducted as "mandatory negotiations," as that term is used in § 101.73 of this chapter. If these parties are unable to reach a negotiated agreement, MSS Licensees may involuntarily relocate such Existing Licensees after December 8, 2004.

(ii) [Reserved]

(iii) On the date that the first MSS licensee begins operations in the 2000- 2020 MHz band, a one-year mandatory negotiation period begins between MSS licensees and Existing Licensees in DMAs 31-210, as such DMAs existed on September 6, 2000. After the end of the mandatory negotiation period, MSS licensees may involuntarily relocate any Existing Licensees with which they have been unable to reach a negotiated agreement. As described elsewhere in this paragraph (f), MSS Licensees are obligated to relocate these Existing Licensees within the specified three- and five-year time periods.

(2) Before negotiating with MSS licensees, Existing Licensees in Nielsen Designated Market Areas where there is a BAS frequency coordinator must coordinate and select a band plan for the market area. If an Existing Licensee wishes to operate in the 2025-2110 MHz band using the channel plan specified in § 78.18(a)(6)(i) of this part, then all licensees within that Existing Licensee's market must agree to such operation and all must operate on a secondary basis to any licensee operating on the channel plan specified in § 78.18(a)(6)(ii). All negotiations must produce solutions that adhere to the market area's band plan.

(3) [Reserved]

(4) [Reserved]

(5) As of the date the first MSS Licensee begins operations in the 1990-2025 MHz band, MSS Licensees must relocate Existing Licensees in DMAs 31-100, as they existed as of September 6, 2000, within three years, and in the remaining DMAs, as they existed as of September 6, 2000, within five years.

(6) On December 9, 2013, all Existing Licensees will become secondary in the 1990-2025 MHz band. Upon written demand by any MSS Licensee, Existing Licensees must cease operations in the 1990-2025 MHz band within six months.

(g) The 1995-2000 MHz band is allocated for Advanced Wireless Services (AWS). AWS licensees in this band are New Entrants as defined in paragraph (a) of this section and therefore must comply with sections (a), (b), (c), (d), (e) and (g) of this section to the extent AWS entrants seek to relocate Broadcast Auxiliary Service licensees operating on a primary basis and fixed service licensees operating on a primary basis in the 1990-2025 MHz band (Existing Licensees).

(1) AWS licensees are required to protect previously Existing Licensees in this band from interference.

(a) An AWS licensee may not begin operations in a specific Nielsen Designated Market Area (DMA) until all incumbent operations in that DMA have been either (1) relocated by an MSS licensee, an AWS entrant, or another licensee; or (2) discontinued pursuant to the terms of paragraph (a) of this

section. If Existing Licensees remain in the band after December 9, 2013, they must cease operations within six months of receiving a written demand from either an MSS licensee or an AWS licensee.

(b) An AWS licensee in this band is required conform to the technical criteria specified in TIA Bulletin TSB 10-F, or procedures other than TSB 10-F that follow generally acceptable good engineering practices pursuant to § 101.105(c) of this chapter, to determine whether its operations in the 1995-2000 MHz band would cause interference to the operations of Existing Licensees in the 1990-2025 MHz band. To the extent that the TSB 10-F demonstrates that an AWS licensee may cause interference to Existing Licensees in an adjacent DMA, the AWS licensee must either relocate the Existing Licensees or revise its proposed operations to ensure, in accordance with the technical criteria in the TSB 10-F, that its revised operations will not cause interference to Existing Licensees in adjacent DMAs.

(2) If a specific DMA has not yet been cleared and an AWS licensee seeks to begin operations in the specific DMA, an AWS licensee may negotiate with an Existing Licensee for the purpose of agreeing to terms under which the Existing Licensees would relocate their operations to one of the channel plans specified in § 74.602(a)(3) of this chapter, to other authorized bands, or to other media; or, alternatively, would discontinue use of the 1990-2025 MHz band. An AWS licensee may negotiate individually or collectively for relocation of Existing Licensees, but the AWS licensee is required to coordinate its anticipated clearance schedule with other New Entrants. New entrants are expected to work cooperatively with all interested parties to avoid duplicative efforts and undue delay in the negotiation and transition process. Parties may not decline to negotiate, though Existing Licensees may decline to be relocated. The good faith provisions set-forth in § 101.73 of this chapter apply throughout the negotiation and relocation process.

(3) If a mandatory negotiation period for or an involuntary relocation of Existing Licensees in a particular DMA has already been triggered pursuant to paragraph (e) of this section or pursuant to provisions set-forth elsewhere in this chapter or by order in WT Docket 02-55, ET Docket 00-258, or ET Docket 95-18, an AWS licensee seeking to operate in that particular DMA will not trigger a new negotiation or involuntary relocation schedule pursuant to this section. If such has not occurred with respect to a specific DMA, the following shall apply to AWS licensees at 1995-2000 MHz:

(a) Existing Licensees in DMAs 1-30, as such DMAs existed on September 6, 2000, are subject to involuntary relocation. Under involuntary relocation, the Existing Licensees are required to relocate providing that the New Entrant complies with the requirements set-forth in paragraph (c) of this section and furnishes Existing Licensees with comparable facilities, as defined in § 101.75 (b) of this chapter.

(b) For the remaining DMAs, as such DMAs existed on September 6, 2000, a one-year mandatory negotiation period will commence between Existing Licensees and New Entrants (if such has not already occurred or been triggered) when an AWS licensee approaches any Existing Licensee operating in the specific DMA. Mandatory negotiations shall be conducted in accordance with the good faith provisions set-forth in § 101.73 of this chapter with the goal of providing the Existing Licensees with comparable facilities, as defined in § 101.73(d)(1)-(3) of this chapter. After the end of the mandatory negotiation period, an AWS licensee may involuntarily relocate any Existing Licensees with which they have been unable to reach a negotiated agreement.

(c) To the extent the Commission adopts an earlier transition date to relocate Existing Licensees in a specific DMA in WT Docket 02-55, ET Docket 00-258, or ET Docket 95-18, AWS licensees and Existing Licensees shall comply with the requirements set-forth and adopted in those proceedings

Part 101 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 101—FIXED MICROWAVE SERVICES

20. The authority citation for Part 101 continues to read as follows:

AUTHORITY: 47 U.S.C. Secs. 154, 303.

Policies Governing Microwave Relocation From the 1850–1990 and 2110–2200 MHz Bands

21. Paragraph (f) of Section 101.69 is revised to read as follows:

§ 101.69 Transition of the 1850–1990 MHz, 2110–2150 MHz, and 2160–2200 MHz bands from the fixed microwave services to personal communications services and emerging technologies.

Fixed Microwave Services (FMS) in the 1850–1990 MHz, 2110–2150 MHz, and 2160–2200 MHz bands have been allocated for use by emerging technology (ET) services, including Personal Communications Services (PCS), Advanced Wireless Services (AWS), and Mobile Satellite Services (MSS). The rules in this section provide for a transition period during which ET licensees may relocate existing FMS licensees using these frequencies to other media or other fixed channels, including those in other microwave bands.

(a) ET licensees may negotiate with FMS licensees authorized to use frequencies in the 1850–1990 MHz, 2110–2150 MHz, and 2160–2200 MHz bands, for the purpose of agreeing to terms under which the FMS licensees would:

- (1) Relocate their operations to other fixed microwave bands or other media; or alternatively
- (2) Accept a sharing arrangement with the ET licensee that may result in an otherwise impermissible level of interference to the FMS operations.

(b)—(c) [Reserved]

(d) Relocation of FMS licensees in the 2110–2150 and 2160–2200 MHz band will be subject to mandatory negotiations only. Except as provided in paragraph (e) of this section, mandatory negotiation periods are defined as follows:

- (1) Non-public safety incumbents will have a two-year mandatory negotiation period; and
- (2) Public safety incumbents will have a three-year mandatory negotiation period.

(e) Relocation of FMS licensees by Mobile-Satellite Service (MSS) licensees, including MSS licensees providing Ancillary Terrestrial Component (ATC) service, will be subject to mandatory negotiations only. Mandatory negotiation periods that are triggered in the first instance by MSS/ATC licensees are defined as follows:

- (1) The mandatory negotiation period for non-public safety incumbents will end December 8, 2004.
- (2) The mandatory negotiation period for public safety incumbents will end December 8, 2005.

(f) AWS licensees operating in the 1915–1920 MHz band will follow the requirements and procedures set forth in ET Docket No. 00–258 and WT Docket No. 04–356.

(g) If no agreement is reached during the mandatory negotiation period, an ET licensee may initiate involuntary relocation procedures. Under involuntary relocation, the incumbent is required to relocate, provided that the ET licensee meets the conditions of §101.75.

22. Section 101.79(a)(1) is revised to read as follows:

§ 101.79 Sunset provisions for licensees in the 1850–1990 MHz, 2110–2150 MHz, and 2160–2200 MHz bands.

(a) FMS licensees will maintain primary status in the 1850–1990 MHz, 2110–2150 MHz, and 2160–2200 MHz bands unless and until an ET licensee (including MSS/ATC operator) requires use of the spectrum. ET licensees are not required to pay relocation costs after the relocation rules sunset. Once the relocation rules sunset, an ET licensee may require the incumbent to cease operations, provided that the ET licensee intends to turn on a system within interference range of the incumbent, as determined by TIA TSB 10–F (for terrestrial-to-terrestrial situations) or TIA TSB 86 (for MSS satellite-to-terrestrial situations) or any standard successor. ET licensee notification to the affected FMS licensee must be in writing and must provide the incumbent with no less than six months to vacate the spectrum. After the six-month notice period has expired, the FMS licensee must turn its license back into the Commission, unless the parties have entered into an agreement which allows the FMS licensee to continue to operate on a mutually agreed upon basis. The date that the relocation rules sunset is determined as follows:

(1) For the 2110–2150 MHz and 2160–2180 MHz bands, ten years after the first ET license is issued in the respective band; and

* * * * *

APPENDIX B

Supplemental Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹⁰ the Commission has prepared this Supplemental Initial Regulatory Flexibility Analysis (Supplemental IRFA) of the possible significant economic impact on a substantial number of small entities of the policies and rules considered in this *Further Notice of Proposed Rulemaking (Further Notice)*. Initial Regulatory Flexibility Analyses were included in the *AWS-2 NPRM*¹¹ and the *AWS-3 NPRM*.¹² Written public comments are requested on this Supplemental IRFA. Comments must be identified as responses to the Supplemental IRFA and must be filed by the deadlines for comments on the *Further Notice*. The Commission will send a copy of the *Further Notice*, including this Supplemental IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).¹³ In addition, the *Further Notice* and Supplemental IRFA (or summaries thereof) will be published in the Federal Register.¹⁴

A. Need for, and Objectives of, the Proposed Rules

2. The *Further Notice* contemplates service rules for licensed fixed and mobile services, including advanced wireless services (AWS), in the 1915-1920 MHz and 1995-2000 MHz bands (collectively the "H Block") and the 2155-2175 MHz and 2175-2180 MHz bands (collectively the "AWS-3 band").¹⁵ These service rules include application, licensing, operating and technical rules for the AWS-3 band and H Block.¹⁶ Consistent with the Commission's policy objective of affording licensees the flexibility to deploy new technologies, to implement service innovations, and to respond to market forces, the *Further Notice* proposes service rules that provide AWS-3 and H Block licensees with the flexibility to provide any fixed or mobile service, including advanced wireless services, which is consistent with the allocations for this spectrum. The market-oriented licensing framework for these bands would ensure that this spectrum is efficiently utilized and will foster the development of new and innovative technologies and services, as well as encourage the growth and development of broadband services, ultimately leading to greater benefits to consumers.

3. The *Further Notice* seeks to adopt rules that will reduce regulatory burdens, promote innovative services, and encourage flexible use of this spectrum. Such an approach opens up economic opportunities to a variety of spectrum users, which could include small businesses.

4. The *Further Notice* proposes combining the 2155-2175 MHz band with the 2175-2180 MHz band to form a 25 MHz block of spectrum.¹⁷

¹⁰ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

¹¹ Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz; Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 04-356, WT Docket No. 02-353, *Notice of Proposed Rulemaking*, 19 FCC Rcd 19263 (2004) (*AWS-2 NPRM*).

¹² Service Rules for Advanced Wireless Services in the 2155-2175 MHz Band, WT Docket No. 07-195, *Notice of Proposed Rulemaking*, 22 FCC Rcd 17035 (2007) (*AWS-3 NPRM*).

¹³ See 5 U.S.C. § 603(a).

¹⁴ See 5 U.S.C. § 603(a).

¹⁵ See *Further Notice* at ¶ 1.

¹⁶ See *Further Notice* at ¶ 3-4.

¹⁷ See *Further Notice* at ¶ 3.

5. In the *Further Notice*, the Commission also seeks comments on its proposal to permit both downlink and uplink transmissions throughout the entire AWS-3 band.¹⁸

6. In the *Further Notice*, the Commission also seeks comments on its proposal to require an AWS-3 licensee to provide free, two-way broadband Internet service that includes engineered data rates of at least 768 kps downstream for the average user experience using up to 25 percent of the licensee's wireless network capacity and an "always on" network-based filtering mechanism.¹⁹

7. In the *Further Notice*, the Commission seeks comments on its proposal to require the licensee to provide for open devices and open applications for its premium service and open devices for its free service.²⁰

8. In the *Further Notice*, the Commission seeks comments on its proposal to adopt a single nationwide license for the 2155-2180 MHz band.²¹

9. In the *Further Notice*, the Commission seeks comments on its proposal to adopt open eligibility for the AWS-3 band.²²

10. In the *Further Notice*, the Commission seeks comments on its proposal to allow licensees to disaggregate, partition, and lease the spectrum.²³

11. In the *Further Notice*, the Commission seeks comments on its proposal to require AWS-3 licensees to provide signal coverage and offer service to: 1) at least 50 percent of the total population of the nation within four years of commencement of the license term and 2) at least 95 percent of the total population of the nation at the end of the 10-year license term.²⁴

12. In the *Further Notice*, the Commission seeks comments on its proposal to provide initial license term of ten years and subsequent renewal terms of ten years.²⁵

13. In the *Further Notice*, the Commission seeks comments on its proposal to provide that mutually exclusive applications should be resolved through competitive bidding.²⁶

14. In the *Further Notice*, the Commission seeks comments on its proposal to require AWS-3 mobiles to attenuate out-of-band emissions (OOBE) by $60 + 10\log(P)$ dB outside of the AWS-3 band, and establish a power limit for AWS-3 mobile devices of 23 dBm/MHz equivalent isotropically radiated power (EIRP).²⁷

¹⁸ See *Further Notice* at ¶ 3.

¹⁹ See *Further Notice* at ¶ 3.

²⁰ See *Further Notice* at ¶ 3.

²¹ See *Further Notice* at ¶ 3.

²² See *Further Notice* at ¶ 3.

²³ See *Further Notice* at ¶ 3.

²⁴ See *Further Notice* at ¶ 3.

²⁵ See *Further Notice* at ¶ 3.

²⁶ See *Further Notice* at ¶ 3.

²⁷ See *Further Notice* at ¶ 3.

15. In the *Further Notice*, the Commission seeks comments on its proposal to require an OOB limit of $43 + 10 \log (P)$ dB for AWS-3 base and fixed downlink stations and a power limit of 1640 watts peak EIRP in non-rural areas and 3280 watts peak EIRP in rural areas.²⁸

16. In the *Further Notice*, the Commission seeks comments on its proposal to license the H Block using exclusive geographic area licensing on a Basic Trading Area (BTA) basis.²⁹

17. In the *Further Notice*, the Commission seeks comments on its proposal to adopt open eligibility for the H Block.³⁰

18. In the *Further Notice*, the Commission seeks comments on its proposal to allow licensees to disaggregate, partition, and lease the spectrum.³¹

19. In the *Further Notice*, the Commission seeks comments on its proposal to require an H Block licensee to provide signal coverage and offer service to: 1) at least 35 percent of the population in each licensed area within four years and 2) at least 70 percent of the population in each licensed area at the end of the license term.³²

20. In the *Further Notice*, the Commission seeks comments on its proposal to provide an initial license term of ten years and subsequent renewal terms of ten years.³³

21. In the *Further Notice*, the Commission seeks comments on its proposal to provide that mutually exclusive applications should be resolved through competitive bidding.³⁴

22. In the *Further Notice*, the Commission seeks comments on its proposal to require H Block licensees in the 1915-1920 MHz band to pay a *pro rata* share of expenses previously incurred by UTAM Inc. in clearing that band.³⁵

23. In the *Further Notice*, the Commission seeks comments on its proposal to adopt both relocation requirements for H Block entrants in the 1995-2000 MHz band and procedures for cost-sharing among other new entrants in the Broadcast Auxiliary Service band, including Sprint Nextel and Mobile Satellite Service entrants.³⁶

24. In the *Further Notice*, the Commission seeks comments on its proposal to prohibit base and fixed transmission in the 1915-1920 MHz band.³⁷

²⁸ See *Further Notice* at ¶ 3.

²⁹ See *Further Notice* at ¶ 4.

³⁰ See *Further Notice* at ¶ 4.

³¹ See *Further Notice* at ¶ 4.

³² See *Further Notice* at ¶ 4.

³³ See *Further Notice* at ¶ 4.

³⁴ See *Further Notice* at ¶ 4.

³⁵ See *Further Notice* at ¶ 4.

³⁶ See *Further Notice* at ¶ 4.

³⁷ See *Further Notice* at ¶ 4.

25. In the *Further Notice*, the Commission seeks comments on its proposal to require mobiles at 1915-1920 MHz to attenuate OOB by $90 + 10\log P$ dB within the PCS band (1930-1990 MHz band), and establish a power limit for mobiles of 23 dBm/MHz EIRP.³⁸

26. In the *Further Notice*, the Commission seeks comments on its proposal to prohibit mobile transmission in the 1995-2000 MHz band.³⁹

27. In the *Further Notice*, the Commission seeks comments on its proposal to adopt an OOB limit of $43 + 10\log(P)$ dB for base and fixed stations at 1995-2000 MHz and a power limit of 1640 watts peak EIRP in non-rural areas and 3280 watts peak EIRP in rural areas.⁴⁰

28. Our actions today bring us closer to our goals of achieving the universal availability of broadband access and increasing competition in the provision of such broadband services both in terms of the types of services offered and in the technologies utilized to provide those services. The widespread deployment of broadband will bring new services to consumers, stimulate economic activity, improve national productivity, and advance many other objectives – such as improving education, and advancing economic opportunity for more Americans. By encouraging the growth and development of broadband, our actions today also foster the development of facilities-based competition. We achieve these objectives by taking a market-oriented approach to licensing this spectrum that provides greater certainty, minimal regulatory intervention, and leads to greater benefits to consumers.

B. Legal Basis

29. The proposed action is authorized pursuant to sections 1, 2, 4(i), 7, 10, 201, 214, 301, 302, 303, 307, 308, 309, 310, 319, 324, 332 and 333 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 157, 160, 201, 214, 301, 302, 303, 307, 308, 309, 310, 319, 324, 332, 333.

C. Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply

30. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁴¹ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁴² In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.⁴³ A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁴⁴

³⁸ See *Further Notice* at ¶ 4.

³⁹ See *Further Notice* at ¶ 4.

⁴⁰ See *Further Notice* at ¶ 4.

⁴¹ 5 U.S.C. § 603(b)(3).

⁴² 5 U.S.C. § 601(6).

⁴³ 5 U.S.C. § 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

⁴⁴ 15 U.S.C. § 632.

31. The Commission has not yet determined how many licenses will be awarded in the 1915-1920 MHz, 1995-2000 MHz, and 2155-2180 MHz bands. Moreover, the Commission does not yet know how many applicants or licensees in these bands will be small entities. Though the Commission does not know for certain which entities are likely to apply for these frequencies, we note that the H Block and AWS-3 band are comparable to cellular service and personal communications service.⁴⁵ Accordingly, we believe the following sorts of regulated entities might ultimately also be applicants or licensees in this context and thus might be directly affected by our contemplated rules.

32. *Small Businesses.* Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data.⁴⁶

33. *Small Organizations.* Nationwide, there are approximately 1.6 million small organizations.⁴⁷

34. *Small Governmental Jurisdictions.* The term “small governmental jurisdiction” is defined as “governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”⁴⁸ As of 2002, there were approximately 87,525 governmental jurisdictions in the United States.⁴⁹ This number includes 38,967 county governments, municipalities, and townships, of which 37,373 (approximately 95.9%) have populations of fewer than 50,000, and of which 1,594 have populations of 50,000 or more. Thus, we estimate the number of small governmental jurisdictions overall to be 85,931 or fewer.

35. *Wireless Telecommunications Carriers (except Satellite).* Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category.⁵⁰ Prior to that time, such firms were within the now-superseded categories of “Paging” and “Cellular and Other Wireless Telecommunications.”⁵¹ Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.⁵² Because Census Bureau data are not yet available for the new category, we will estimate small business prevalence using the prior categories and associated data. For the category of Paging, data for 2002 show that there were 807 firms that operated for the entire year.⁵³ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.⁵⁴ For the category of Cellular and Other Wireless

⁴⁵ See, e.g., *AWS-2 Service Rules NPRM*; *AWS-3 Service Rules NPRM*.

⁴⁶ See SBA, Programs and Services, SBA Pamphlet No. CO-0028, at page 40 (July 2002).

⁴⁷ Independent Sector, *The New Nonprofit Almanac & Desk Reference* (2002).

⁴⁸ 5 U.S.C. § 601(5).

⁴⁹ U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, Section 8, pages 272-273, Tables 415 and 417.

⁵⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517210 Wireless Telecommunications Categories (Except Satellite)”; <http://www.census.gov/naics/2007/def/ND517210.HTM#N517210>.

⁵¹ U.S. Census Bureau, 2002 NAICS Definitions, “517211 Paging”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, “517212 Cellular and Other Wireless Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

⁵² 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

⁵³ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517211 (issued Nov. 2005).

⁵⁴ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

Telecommunications, data for 2002 show that there were 1,397 firms that operated for the entire year.⁵⁵ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁵⁶ Thus, we estimate that the majority of wireless firms are small.

36. Wireless Telephony. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. As noted above, the SBA has developed a small business size standard for "Wireless Telecommunications Carriers (except Satellite)" services.⁵⁷ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁵⁸ According to Commission data, 432 carriers reported that they were engaged in the provision of wireless telephony.⁵⁹ We have estimated that 221 of these are small under the SBA small business size standard.

37. Broadband Personal Communications Service. The broadband personal communications services (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.⁶⁰ For Block F, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁶¹ These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.⁶² No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 "small" and "very small" business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁶³ On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.⁶⁴

38. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as "small" or "very

⁵⁵ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

⁵⁶ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

⁵⁷ 13 C.F.R. § 121.201, NAICS code 517210.

⁵⁸ 13 C.F.R. § 121.201, NAICS code 517210.

⁵⁹ FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, "Trends in Telephone Service" at Table 5.3, page 5-5 (Feb. 2007). This source uses data that are current as of October 2005.

⁶⁰ See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852, paras. 57-60 (1996); see also 47 C.F.R. § 24.720(b).

⁶¹ See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852, para. 60.

⁶² See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

⁶³ FCC News, "Broadband PCS, D, E and F Block Auction Closes," No. 71744 (released January 14, 1997).

⁶⁴ See "C, D, E, and F Block Broadband PCS Auction Closes," *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

small” businesses.⁶⁵ Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant.

39. Cellular Licensees. As noted, the SBA has developed a small business size standard for wireless firms within the broad economic census category “Wireless Telecommunications Carriers (except Satellite).”⁶⁶ Under this category, a wireless business is small if it has 1,500 or fewer employees. Also, as noted, using Commission data we have estimated that most of these entities are small.

D. Description of Projected Reporting, Recordkeeping, and other Compliance Requirements

40. The projected reporting, recordkeeping, and other compliance requirements resulting from the *Further Notice* will apply to all entities in the same manner. The Commission believes that applying the same rules equally to all entities in this context promotes fairness. The Commission does not believe that the costs and/or administrative burdens associated with the rules will unduly burden small entities. The revisions the Commission adopts should benefit small entities by giving them more information, more flexibility, and more options for gaining access to valuable wireless spectrum.

41. Applicants for AWS licenses in the H Block and AWS-3 band will be required to file license applications using the Commission’s automated Universal Licensing System (ULS). ULS is an online electronic filing system that also serves as a powerful information tool that enables potential licensees to research applications, licenses, and antennae structures. It also keeps the public informed with weekly public notices, FCC rulemakings, processing utilities, and a telecommunications glossary. Applicants will be required to submit short-form auction applications using FCC Form 175.⁶⁷ In addition, winning bidders must submit long-form license applications through ULS using Form 601,⁶⁸ FCC Ownership Disclosure Information for the Wireless Telecommunications Services using FCC Form 602, and other appropriate forms.⁶⁹

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

42. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.”⁷⁰

43. Here, we propose service rules that are efficient and also fair to all entities, including small entities. We also note that, specifically to assist small businesses, the associated *AWS-2 NPRM* and the *AWS-3 NPRM* propose to establish small business size standards and associated small business bidding

⁶⁵ See “C and F Block Broadband PCS Auction Closes; Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 2339 (2001).

⁶⁶ 13 C.F.R. § 121.201, NAICS code 517210.

⁶⁷ See generally 47 C.F.R. § 1.2105.

⁶⁸ 47 C.F.R. § 1.913(a)(1).

⁶⁹ 47 C.F.R. § 1.2107.

⁷⁰ 5 U.S.C. § 603(c)(1) – (c)(4).

credits for the 1915-1920 MHz, 1995-2000 MHz, 2155-2175 MHz, and 2175-2180 MHz bands.⁷¹ The *AWS-2 NPRM* and the *AWS-3 NPRM* propose to define a small business as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a very small business as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million, if licenses are not nationwide.⁷² The *AWS-2 NPRM* and the *AWS-3 NPRM* propose a bidding credit of 15 percent for small businesses and a bidding credit of 25 percent for very small businesses under certain circumstances.⁷³

44. The *AWS-2 NPRM* and the *AWS-3 NPRM* also solicit comment on a number of proposals and alternatives regarding the service rules for the 1915-1920 MHz, 1995-2000 MHz, 2155-2175 MHz, and 2175-2180 MHz bands.⁷⁴ The *AWS-2 NPRM* and the *AWS-3 NPRM* seek to adopt rules that will reduce regulatory burdens, promote innovative services and encourage flexible use of this spectrum. It opens up economic opportunities to a variety of spectrum users, which could include small businesses. The *AWS-2 NPRM* and the *AWS-3 NPRM* consider various proposals and alternatives partly because the Commission seeks to minimize, to the extent possible, the economic impact on small businesses.⁷⁵

45. The *AWS-2 NPRM* and the *AWS-3 NPRM* invite comment on various alternative licensing and service rules and on a number of issues relating to how the Commission should craft service rules for this spectrum, which could have an impact on small entities. For example, the Commission seeks comment on the licensing approach for these frequencies and how the size of spectrum blocks would impact small entities.⁷⁶ The *AWS-2 NPRM* and the *AWS-3 NPRM* seek proposals for a geographic area approach to geographic areas as opposed to a station-defined licensing approach.⁷⁷

46. The regulatory burdens proposed in the *AWS-2 NPRM* and the *AWS-3 NPRM*, such as filing applications on appropriate forms, appear necessary in order to ensure that the public receives the benefits of innovative new services, or enhanced existing services, in a prompt and efficient manner. The Commission will continue to examine alternatives in the future with the objectives of eliminating unnecessary regulations and minimizing any significant economic impact on small entities. The Commission invites comment on any additional significant alternatives parties believe should be considered and on how the approach outlined in the *AWS-2 NPRM* and the *AWS-3 NPRM* will impact small entities, including small businesses and small government entities.

47. In addition, we seek comment on proposed rules that would permit licensees, including small entity licensees, to disaggregate, partition, and lease the spectrum. These options are helpful to small entities, and we seek comment on these proposals.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

48. None.

⁷¹ See *AWS-2 NPRM*, 19 FCC Rcd at 19307-10 ¶ 119-124; *AWS-3 NPRM*, 22 FCC Rcd at 17096-98 ¶ 150-54.

⁷² *AWS-2 NPRM*, 19 FCC Rcd at 19308-09 ¶ 122; *AWS-3 NPRM*, 22 FCC Rcd at 17097 ¶ 152.

⁷³ *AWS-2 NPRM*, 19 FCC Rcd at 19309-10 ¶ 123-24; *AWS-3 NPRM*, 22 FCC Rcd at 17097-98 ¶ 153-54.

⁷⁴ See generally *AWS-2 NPRM*; *AWS-3 NPRM*.

⁷⁵ *AWS-2 NPRM*, 19 FCC Rcd at 19325-26 ¶ 26-31; *AWS-3 NPRM*, 22 FCC Rcd at 17106-08 ¶ 21-25.

⁷⁶ See *AWS-2 NPRM*, 19 FCC Rcd at 19272-77 ¶ 21-31; *AWS-3 NPRM*, 22 FCC Rcd at 17106-08 ¶ 34-38.

⁷⁷ See *AWS-2 NPRM*, 19 FCC Rcd at 19271-72 ¶ 18-20; *AWS-3 NPRM*, 22 FCC Rcd at 17050-51 ¶ 31-33.